

GREENLEE
COUNTY
The wonderland
of ARIZONA



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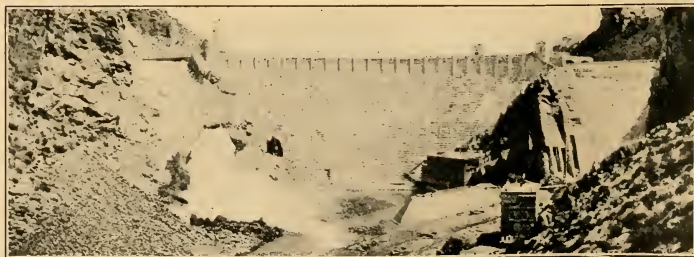
ARIZONA STATE CAPITOL AT PHOENIX

ARIZONA

ARIZONA! It is a land of romance and fascination. A land of bewitching scenery and unexcelled beauty. Its rocks and mountains bear mute testimony to its great age, while its rich fields of grain and alfalfa attest its newness from the standpoint of modern activities.

From out the past there trails past the vision, ghosts of a pre-historic race, whose civilization was of no mean degree, judging from what the archaeologist uncovers in their long deserted ruins which dot many sections of the state. Then in a later age came the Spanish conquistadors and the padres who built Missions and endeavored to convert the savage to their religion. Last, but not least, even in romance and charm, came the pioneer, carrying his rifle by his side as he tilled the soil or herded his cattle, to protect himself from the blood-thirsty warriors of Victoria, Cochise and the cruelest of them all, Geronimo.

No less interesting, romantic or fascinating are the achievements of today, as one views the new cities and thriving hamlets that have sprung into existence within



ROOSEVELT DAM, ARIZONA'S GREATEST ENGINEERING FEAT



FOUR BAR FLATS, SPRINGERVILLE ROAD

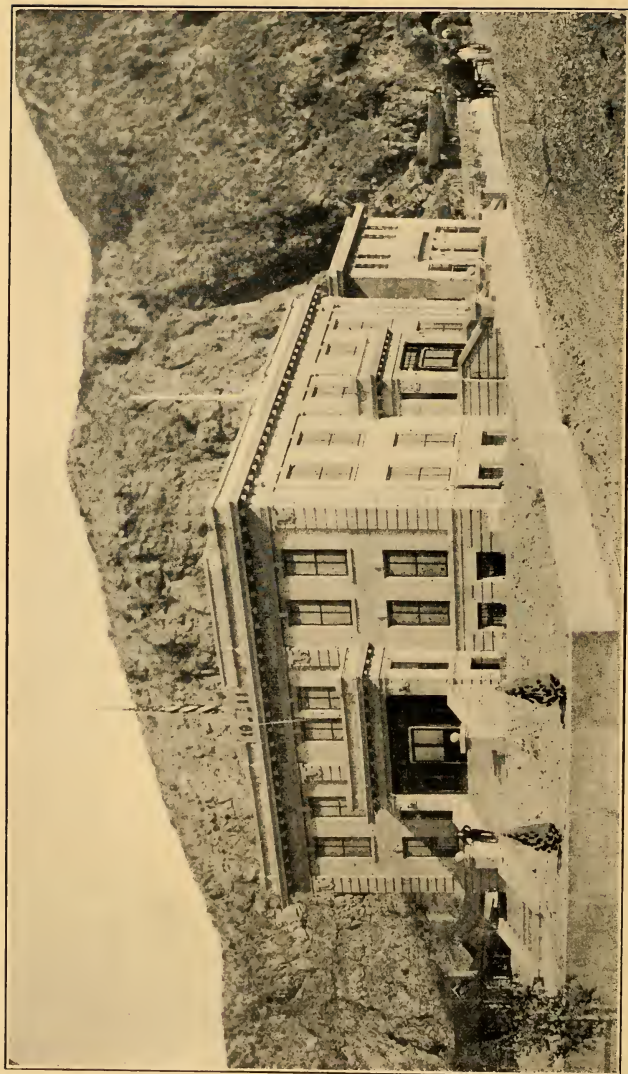
the bounds of this youngest of the states of the Union. There are fertile fields of golden grain and green alfalfa, which have taken the place of the greasewood and mesquite; orange groves and olive orchards; the earth yielding up her rich treasures of gold, silver and copper, because man has conquered by the cunning of his brain, and the energy latent in his hands. All this goes to make Arizona, indeed, the "Wonderland of America."

No one visits this Wonderland who does not long to return, if only for a few months' sojourn. No one is ever disappointed in Arizona. Here is found the most elastic climate imaginable; the most variable scenery that can be had anywhere; the most diversified occupations obtainable. Here are experienced altitudes ranging from nearly sea level to almost two miles above. Here are temperatures extending from the tropical to perpetual snow. In Arizona is found the very best of the "Last West." Here in abundance are found the big game of the Rockies, the yelping wolf of the mountains, and the sneaking coyote in the arroyos; the mountain lion and bear in their cliff dwelling homes.

Arizona is the healthiest state in the Union. The atmosphere is so clear and pure that the azure blue of



CLIFTON-METCALF ROAD



GREENLEE COUNTY COURT HOUSE



SPECIMENS TAKEN FROM PREHISTORIC RUINS

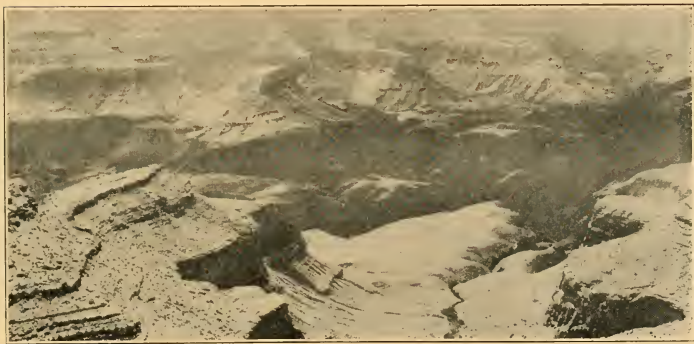
the sky cannot be equalled anywhere. At night the stars are more brilliant, and seem so close that one wants to reach up and touch them. Such is the effect of the Arizona atmosphere. And the sunsets—no artist's brush can ever do them justice, and no language has ever been conceived that can adequately describe them. Their gorgeous colorings are simply beyond the range of human language to portray. All visitors to Arizona are affected alike by what they see. Some one has said:

"Sun land, dun land, rope and spur and gun land,
What is your enchantment, that you hold me in my
dreams?

True land, view land, shade of every hue land,
Mountain peaks and cañons, cradled, dimpling,
gleam.

Glad land, sad land, poor old pagan bad land.

Some day to the castle we shall find the key,
Wild land, mild land, slumbering, much beguiled land.
Then you shall awaken, glad and free."



THE GRAND CANYON OF ARIZONA



AMONG THE BIG PINES ON THE SPRINGERVILLE ROAD

GREENLEE COUNTY

IN the making of history, long before Arizona was a state and Greenlee a county, scenes were enacted within the borders of what is now Greenlee county, that had they been recorded, would loom large in American annals; scenes where the soldier boy and his rifle matched the half naked savage with his bow and arrow and scalping knife.

Within the borders of this county Geronimo and his savage hordes carried on much of their death-dealing cruelty. There were many victims of their savagery in the early days, and there are many yet living in Greenlee county, who passed through those trying times, when men lived in perpetual fear of being killed and scalped by the red skinned savages.

At one time Greenlee county was a part of Graham but in 1909 pressure enough was brought to bear upon the 25th Legislative Assembly of the Territory of Arizona, to pass an act establishing the boundary of Greenlee county.



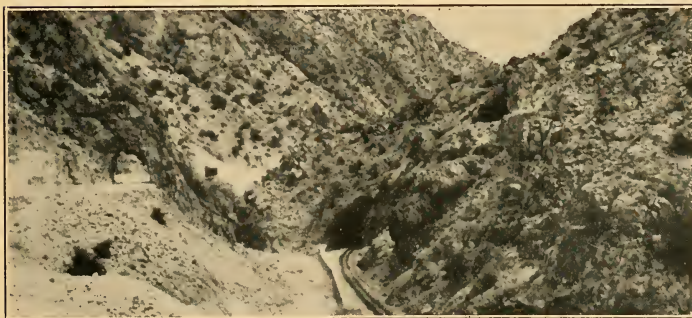
VIEW FROM THE MULE CREEK ROAD



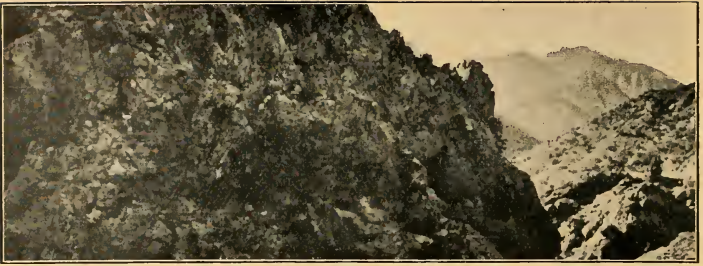
A SCENE ON THE MULE CREEK ROAD

An election was held in November, 1910, for the purpose of electing officers for the new county of Greenlee, and the first officers were: Sheriff, I. B. English; Treasurer, John M. Webster; Recorder, John F. Burke; District Attorney, E. V. Horton; Assessor, James H. Kerby; School Superintendent, J. W. Aker; Supervisors, B. F. Billingsley, George Webster, J. H. T. Cosper. There were several applicants for the county seat, Clifton and Duncan being the leading rivals. Clifton won the prize, and the new Court House was started on January 1st, 1911, and was completed and occupied, September 1st, 1912.

When Greenlee became a county there was not a single good wagon road within its entire boundary; only a few trails, and only one bridge in the whole county. Today, Greenlee county has nearly 200 miles of as fine auto roads as can be found in the state, and some of the most costly and substantial bridges that can be seen anywhere.



TUNNELS ON METCALF ROAD



MOUNTAINS ABOVE CLIFTON

Greenlee county has not stopped in its improvements, but is continuing the road building program, so that in another year tourists will be able to cross it, either north or south, east or west, over the best auto roads in the country.

To those interested in archaeology, Greenlee county offers a rich field of research among pre-historic ruins. Many specimens of pottery and stone implements are still to be found in these ancient dwelling places. In the mountains are remains of the Cliff Dwellings, where there are evidences of an advanced civilization that existed long ages before Caesar ruled Rome. Even when the Spaniards explored this country, in the 16th century, these ruins bore mute evidence of long disuse, and were shrouded in as deep mystery as today.

What became of that race of people, who peacefully tilled the soil and raised corn, cotton and beans? From the evidences of the charred corn, wood and bones which have been uncovered by the builders of the modern canals in the Duncan valley, may there not have been a great



SPECIMENS FROM CLIFF DWELLINGS AND PREHISTORIC RUINS



A PRETTY CURVE ON THE SPRINGVILLE ROAD

cataclysm of volcanic gas and heat, which wiped them out in the twinkling of an eye? Evidences are still extant to support this theory.

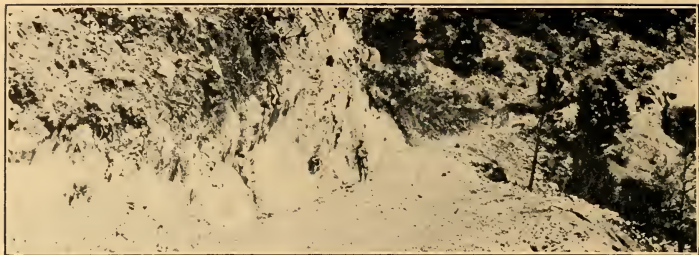
In Greenlee county are found the oldest mining camps in the state, Clifton and Morenci. Here are also found the richest copper deposits of the Southwest. Not only are these camps rich in mineral deposits, but some of the most picturesque scenery in the world is to be found around Clifton, Morenci and Metcalf.

Tourists passing through Greenlee county will have missed much, and will have much to regret, if they do not visit the northern part of the county, which is the scenic part. The trip is one that will never be forgotten, and one of entrancing delights and joyful surprises. The road winds around the vari-colored cliffs, ever opening up new pleasure to the sightseer. The road from Clifton to Morenci is like an enchanted ribbon, appearing and disappearing with almost magic swiftness, as one climbs higher and higher.

There are a number of hot springs throughout Greenlee county which show high medicinal values, and there



A VIEW ON THE MULE CREEK ROAD



ALONG THE SPRINGVILLE ROAD

are possibilities latent in these various springs for those with initiative to establish sanatoriums.

Greenlee county offers to the sportsman the best hunting to be found anywhere in the state. There are quail, doves, whitewings, and cottontails in abundance; the last named may be shot at any time. For the huntsman out for big game, there are offered the mountain lion, the bear, the deer and wild turkey, all of which are abundant in this county.

ROADS

WHILE Arizona is the youngest state in the Union, and Greenlee the youngest county in the state, Greenlee has the finest road system in the country. Beginning at the New Mexico line and running to the Graham county line, east and west, is the Bankhead Highway, which is an excellent gravel road and kept in splendid condition at all times of the year.

From Duncan to Clifton, north, is one of the best roads of its kind in the state. North of Clifton through Metcalf, is the most scenic auto road in the world,



AT AN ALTITUDE OF ABOUT 8000 FEET ON THE SPRINGVILLE ROAD



ON THE ROAD FROM DUNCAN TO CLIFTON

known as the Springerville road. As it goes into the mountains it winds through a heavily timbered region of exquisite beauty. Starting a few miles above Clifton, the engineers have laid out in a zigzag manner up the sides of the mountains, which were almost inaccessible to a horse in many places, one of the most splendid and by far the most scenic road in the country. It is not a narrow trail as is so often encountered by tourists in a mountain country, but a broad auto road, with no grade greater than eight per cent. In the laying out and building of this road an engineering feat as great as that of the Roosevelt dam has been accomplished.

Another road of scenic beauty and great importance to the county of Greenlee is that known as the Mule Creek road, which branches off from the Duncan-Clifton road in a northeasterly direction. This is also a mountain road of great scenic beauty, and a great engineering feat in modern road building.

It may be said much to the credit of Greenlee county that the roads are not built and then left to deteriorate, but modern machinery and a road gang keep the roads in a perfect condition at all times of the year.

With all this wonderful road system the taxes of Greenlee county are not any higher than many other



ROCKS SHOWING EROSION—CLIFTON-DUNCAN ROAD



1. CROSSING THE GILA WITH FREIGHT TEAM QUARTER OF A CENTURY AGO
2. DUNCAN BRIDGE—METHOD OF CROSSING GILA TODAY

3. PIONEER STREET SCENE, DUNCAN
4. STREET SCENE AT DUNCAN TODAY



SOME FINE GREENLEE COUNTY HEREFORDS

counties with less improvements, and not as high as some of them. This is due to the fact that the affairs of the county are administered by a Board of Supervisors who have the interests of the people at heart, and are heavy taxpayers themselves.

THE DUNCAN VALLEY

EMOTIONS akin to those which filled the hearts of the Children of Israel when they first set eyes upon the promised land, well up in the breast of the modern traveler at his first view of the Duncan Valley, nestled between towering mountains, with a river of life-giving water, for both soil and cattle, winding through its centre.

Whether the tourist comes from the east or the west, his view is the same as he reaches the brow of the hill overlooking the valley; he involuntarily stops his car to gaze upon a scene of exquisite beauty and pastoral prosperity and contentment.

If the tourist makes his advent at harvest time he sees fields of rich, waving, golden grain, ready for the reaper and garner. If his visit be made at any other time of the year the view is equally entrancing; fields of rich, verdant alfalfa, with herd after herd of sleek, grazing



A ROUND-UP OF RANGE HORSES



BIRDSEYE VIEW OF DUNCAN

cattle. Even in winter one sees no bleak and barren waste, but perpetual spring everywhere the eye rests.

The topography of the valley is the most advantageous that can be imagined. It is a long, narrow, level stretch of the most fertile land that can be found anywhere. An analysis of the soil shows it to contain an abundance of nitrogen, and composed of fine gravel, coarse sand, medium sand, fine sand and very fine sand, silt and clay, with more than 53 per cent. silt. It is the Gila river silty clay loam.

Winding through the valley is the Gila river, which furnishes water for the cattle that feed on the ranges adjacent to the valley, and also irrigation water for the many fertile farms which have been developed along the banks of the river. At present there are about 54 miles of main irrigation canals in the valley, carrying water to about 4500 acres of farm land. There has just been formed a new irrigation district, under the laws of Arizona, with a new canal 18 miles in length, which, when the sheet dam is completed across the Gila river, to raise its subterranean flow, will take care of approximately 3000 acres more land in the Duncan valley.

There is a great deal of virgin land yet to be reclaimed



FARM SCENE IN THE DUNCAN VALLEY



STREET SCENE IN DUNCAN

in the Duncan valley, and if a storage dam were built on the Gila river there could be at least 8000 acres more of fertile land put under cultivation, and thus add to the agricultural wealth of the valley and county.

The valley, about 35 miles in length, is protected on either side by high rugged mountains, which add to its scenic beauty, and act as a protection from the chilly blasts of the north and the scorching winds of the south.

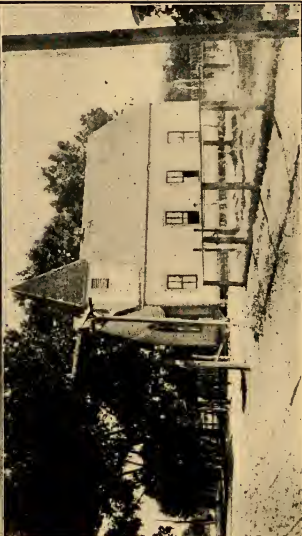
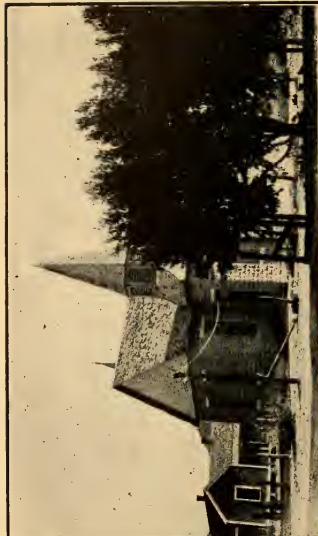
The climate of the Duncan valley is ideal in every respect. The average rainfall for the past ten years was 11.17 inches. In winter the days are just cool enough to be delightful, while in summer the heat is not so intense as in some other parts of the state, the altitude being 3,643 feet. Conditions are such that the farmer is enabled to work the soil the entire year. The mean temperature at Duncan for the past ten years was about 63.

Bumper crops are grown in the Duncan valley. Corn will average 100 bushels to the acre; barley from 70 to 90 bushels; wheat from 50 to 70 bushels; alfalfa 6 to 7 tons an acre, with four or five cuttings a year. With vegetables even better results are obtained.

A part of the Duncan valley extends across the boundary line into New Mexico, but is all tributary to the town of Duncan. Conditions exist there as elsewhere in the valley, and there are some excellent farms in this locality.



A RANCH IN THE DUNCAN VALLEY



TOP—PRESBYTERIAN CHURCH, DUNCAN
BOTTOM—METHODIST CHURCH, DUNCAN



TOP—GRAMMAR SCHOOL, DUNCAN
BOTTOM—HIGH SCHOOL, DUNCAN



SHEEP GRAZING IN THE DUNCAN VALLEY

Duncan Valley being in such close proximity to the mining towns of Clifton, Morenci and Metcalf, the farmer finds a ready market for all farm produce at an exceptionally good price. The farmers of the Duncan valley have another great advantage in the fact that they produce all they need, with the exception of a few groceries, and the clothing they wear. The corn and barley are used to fatten hogs and cattle; the wheat is sold to the local mill; the alfalfa is fed to the local dairy herds; all the range cattle are wintered on the farms, where they are fattened, killed and then marketed in the county.

The transportation facilities of the valley are excellent, as the El Paso & Southwestern railroad runs through it, and the best highway system in the state, makes it possible for the farmer to transport his products to marketing points at a minimum cost by auto truck or team.

The town of Duncan is the principal city in the valley, with a population of about 750, fifteen business houses, two garages, one bank, two hotels, restaurants, several churches, a grammar and a high school, unexcelled by any in the state. Duncan has Masonic and K. P. lodges.



A DUNCAN VALLEY RANCH AND FRUIT ORCHARD



1 TROPHIES OF A DAY'S HUNT NEAR DUNCAN

2. CAVE DWELLING NEAR DUNCAN

3. A CANYON NEAR DUNCAN

4. CAVE DWELLINGS ON THE GILA RIVER NEAR DUNCAN



ADOBE RANCH HOUSES—DUNCAN VALLEY

The people of the Duncan valley are to be congratulated on having an institution such as the Bank of Duncan in their midst. The bank was opened for business in 1908 with a capitalization of \$25,000.00. The stockholders have never received dividends of less than 20 per cent per annum, and the surplus at the present time is \$12,500.00. During the life of the institution the total resources have attained a maximum of \$334,563.19. The bank's closest competitor is 32 miles distant. It has among its patrons large cattle men, substantial farmers, merchants and several mining companies. All of these make the bank their headquarters for the transaction of any business of importance, thus giving support to a home institution. The officers of the bank are always behind any project that will increase the resources of the valley and county. The fact that the resources of the bank are derived from such a diversity of sources causes it to be recognized as one of the strongest in the state.

Duncan also has a flour mill which turns out fifty barrels per day of a product that cannot be excelled anywhere in the country. A new creamery has just been established with a daily capacity of 2,500 pounds of butter, 250 gallons of ice cream, and ten tons of ice. In connection with the creamery is a cold storage plant



A DAIRY RANCH IN THE DUNCAN VALLEY



A RANCH SCENE IN THE DUNCAN VALLEY

capable of caring for all the produce of the valley, such as dressed meat, eggs and dressed poultry. The Duncan Valley Utilities & Supplies Corporation is the promoter, and its plant includes a creamery, ice plant, refrigerating plant, electric light and power plant and water system. The electric plant produces sufficient current for the light and power needs of the town. The water system, which is at present being installed, is modern in every respect. The water is to be pumped into a reservoir above the town, and will flow through the mains by gravity. The mains are also to be connected directly with the well and pumps, thus assuring ample fire protection to the town. The corporation owning the creamery is planning the erection, in the near future, of a vegetable cannery, to care for the products of the valley.

The educational facilities in the Duncan valley are equal to any found in the state. The high school pupils of the rural districts are transported daily to the Duncan Union High School, which has an up-to-date equipment, including a Radio set, second to none in the country. It is hoped that soon a system will be worked out whereby the grade pupils of the rural districts will be handled in the same manner, thus centralizing the educational forces of the valley.

The cattle ranges adjacent to the Duncan valley are



A HAYING SCENE AT FRANKLIN



RANCH BUILDINGS IN THE DUNCAN VALLEY

equal to any to be found in the southwest, and thousands of fine Herefords are bred thereon annually.

Three miles east of Duncan, in the heart of the farming district, is the new townsite of Franklin, located on the E. P. & S. W. railroad and the Bankhead Highway. At present there is a general store and blacksmith shop, which take care of the needs of the farmers of that district. All railway trains stop at Franklin, which is ideally located for the making of a large town as the valley grows.

The growing of deciduous fruits adjacent to Franklin offers an opportunity of prolific promise. Wherever tried, peaches, pears, apricots, apples and plums produce exceptional crops of the most delicious fruit. All the fruit grown in the valley finds a ready market in the county at the highest prevailing prices.

As a health resort no place in the country excels the Duncan valley. It has the ideal climate. Doctors find little to do here, other than to keep tab on the frequent visits of the stork. A movement is on foot to secure a large sanatorium for Duncan.

There are two small hamlets in the Duncan valley on the Clifton road, Sheldon and York. Living in these



TOWN OF FRANKLIN

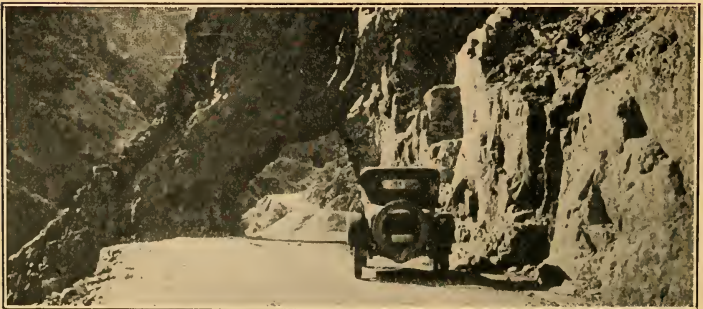


A VALLEY FARM SCENE IN DUNCAN VALLEY

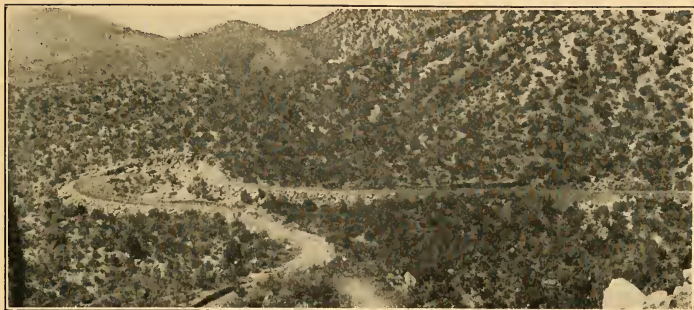
districts are several prosperous farmers and cattle men. Small stores are to be found in each place.

In the mountains that surround the Duncan valley are several mining prospects, some of which have been developed to the extent that much valuable ore has been shipped. Among them are the mines at Ash Peak and Carlisle. Gold, Silver, Copper and Flourspar are found in paying quantities near Duncan, the principal shipping point.

The Duncan Commercial Club is a live institution and is doing much to promote industry in the Duncan valley and Greenlee county. They are preparing plans for the erection of a large building in the center of Duncan for the display of Greenlee county products, and the disseminating of information concerning the county and its resources. Visitors, especially tourists, will always be welcome and every effort put forth to make them feel at home. A ladies rest room will be a feature of the building. The main object of the Club is to impress upon the tourist that western hospitality is more than mere newspaper talk.



TUNNEL ON METCALF AUTO ROAD



LOOP ON SPRINGERVILLE ROAD

In the Duncan valley are found a large number of Prehistoric ruins. Along the Gila river to the east, workmen in building irrigation canals have unearthed some very valuable specimens of pottery, stone implements, beads and skeletons of a race long extinct. Near York are the outlines of several buildings. Most of these ruins are on a high point overlooking the river. From the arrow points, made of obsidian, one may judge that these prehistorics were artistic workmen of no mean degree.

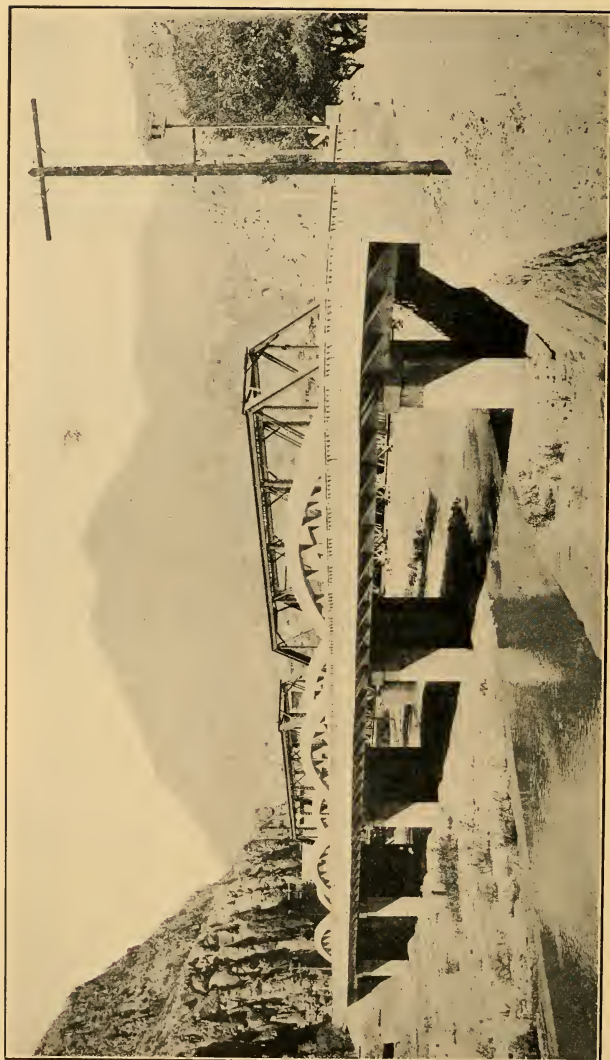
CLIFTON

CLIFTON is the County seat of Greenlee county. It is reached from the south by auto road from Duncan, from the northeast by the Mule Creek road, from the north by the famous Springerville road, and by rail on the El Paso and Southwestern.

Clifton is a mining town nestled away in the most picturesque mountains imaginable, 32 miles northwest of Duncan. A few years ago, as time is reckoned, the place where Clifton now stands was the haunt and



MOUNTAINS ABOVE CLIFTON



CONCRETE BRIDGE OVER SAN FRANCISCO RIVER AT CLIFTON



STEEL BRIDGE AT CLIFTON OVER SAN FRANCISCO RIVER

hiding place of savage hordes of Apache Indians, and many exciting and interesting incidents of those days are related by the old time residents who are still living in Greenlee county.

The lure of Clifton today is not the possible chance to take a shot at some bloodthirsty savage, but treasures of gold, silver and copper hidden away in her hills and mountains, and to the sightseer the majestic rocks and mountains that smile at him on every side. It is the lure of an infinite variety such as lofty, towering mountains, vast, deep cavern-like cañons with rock walls gorgeous in their colorings

The wonderful climate of Clifton makes it a unique and ideal playground for the vacationist. The elevation is 3,465 feet and the average rainfall for the past ten years has been 11.85 inches. As a geological and mineralogical treasure house, its equal cannot be found in the state, and it is doubtful if it can be surpassed anywhere in the United States.

A few miles from Clifton one may plunge into, and spend hours and even days in a virgin wilderness where



CHASE CREEK SCHOOL BUILDING—CLIFTON



CHILDREN'S PLAYGROUND IN FRONT OF TOWN HALL, CLIFTON

at night the lynx and lion disturb his slumbers, and in the daytime the frightened deer stand and look surprised at the invasion of their domain. Winter and summer, nearly the same the year 'round, one finds a continuous round of pleasure and delightful surprises in and around Clifton.

The sportsman will have no difficulty in equipping himself with a pack outfit and guide for a hunting or fishing trip into the mountains. If on a hunt he will find an abundance of deer, turkey and bear. In fact the best hunting ground in the state will be at his disposal. If bent on fishing, a day's journey will land him where he can enjoy the rarest of sport to a fisherman, that of filling his creel with speckled trout.

Clifton is the hub of the district for all supplies, as it is the terminus of the railroad, and because of its accessibility by auto roads. All supplies for the road camps are freighted from the town by auto trucks.

So thoroughly up-to-date are the contractors who are building the new Springerville road that they have a portable school house which is moved with the camp,



BIRDSEYE VIEW OF CLIFTON FROM SMELTER HILL



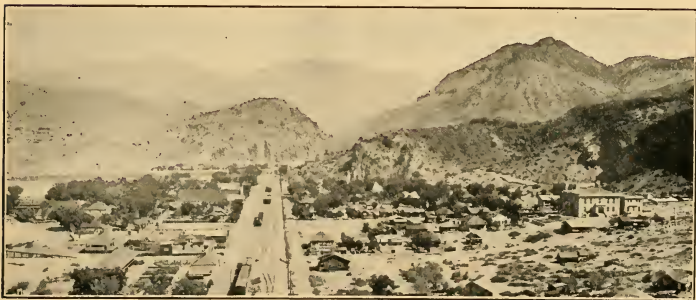
A VIEW OF SLAG DUMP AND SOUTH CLIFTON SHOWING SHANNON SMELTER

and a teacher is employed to teach about 35 children of the Mexican laborers.

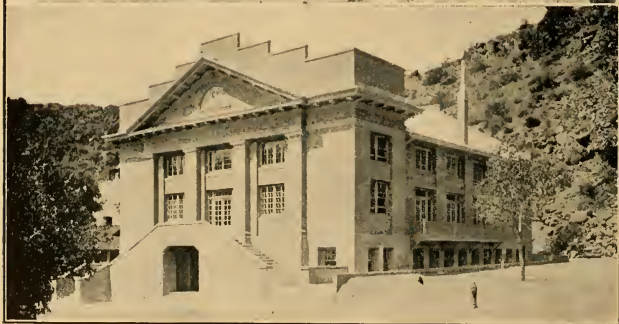
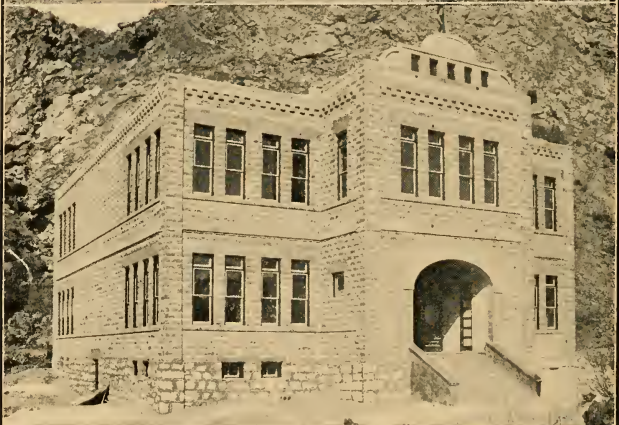
Clifton is an incorporated city and is governed by a Mayor and Common Council. The City Hall is a building of architectural beauty, with council chambers, offices, fire engine room and jail, the latter now being used as sleeping quarters for the members of the fire department.

Clifton has the most modern and complete fire fighting apparatus obtainable, which consists of an American La France Fire truck of 105 horse power, with connections to the fire plugs, of which there are 50 located throughout the city, rotary pump of 350 gallons per minute capacity, a 40 gallon chemical apparatus, 1000 feet of large hose and 200 feet of chemical hose. There is a paid fire department. The alarm system is electrical, and of the latest type, such as is found in all large cities.

Clifton has on exhibition in her city hall a very interesting souvenir of the olden days when freight was brought into that town by ox teams. The bell of the first locomotive used in Arizona, which was brought to Clifton from La Junta, Colorado by ox team in 1880,



BIRDSEYE VIEW OF SOUTH CLIFTON



TOP—HIGH SCHOOL, CLIFTON
 CENTRE—HILLS FLAT GRAMMAR SCHOOL, CLIFTON
 BOTTOM—HIGH SCHOOL AUDITORIUM, CLIFTON



VIEW OF RESIDENCE SECTION, SOUTH CLIFTON

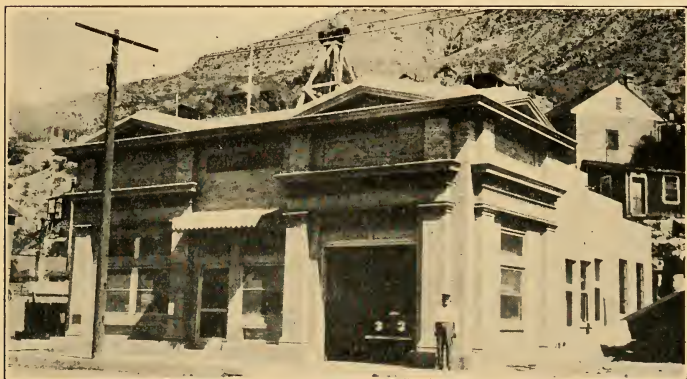
hangs in the hall. The engineer was Henry Arbuckle, and the locomotive was owned by the Arizona Copper Company, and was used on a narrow gauge road between Clifton and Metcalf. This was the first railroad ever built in Arizona.

Clifton has excellent public playgrounds for the city's children, and public camp grounds for tourists are being fitted up.

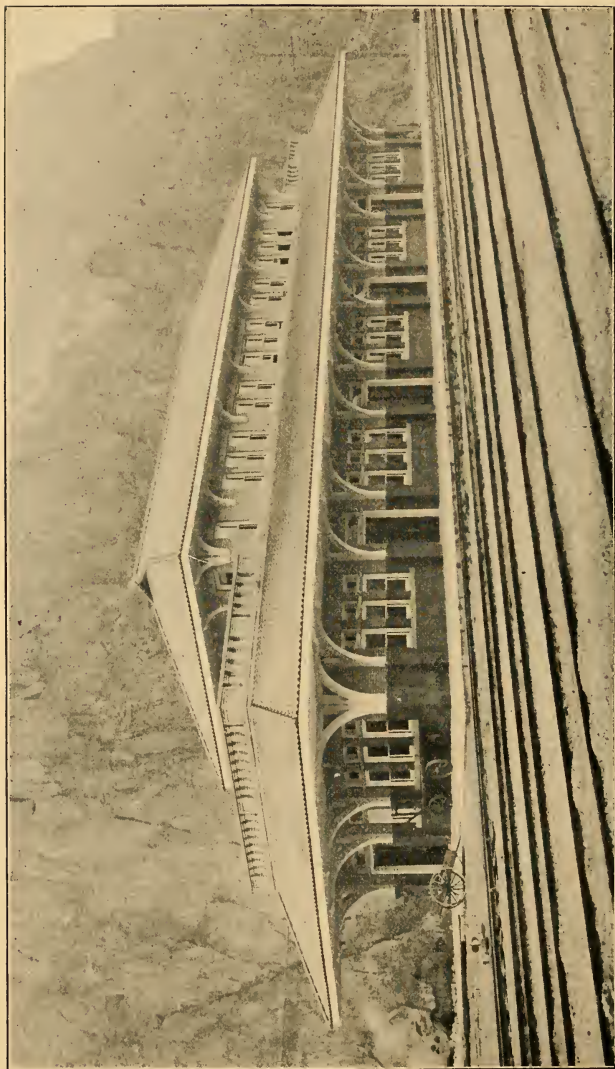
Clifton has a modern ice plant with a daily capacity of 30 tons, and in connection there is a refrigerating plant capable of caring for 25 tons of produce daily.

The visitor to Clifton who leaves his camera at home will have much to regret. The winding roads, the jagged crags, the towering peaks, the deep ravines, the vari-hued rocks, all offer a rare opportunity to the kodak enthusiast not even surpassed by the famous Grand Cañon.

Some of the most substantial as well as the most beautiful buildings in the state are to be found in the



TOWN HALL AND FIRE STATION, CLIFTON



EL PASO & SOUTHWESTERN DEPOT, CLIFTON



CONCRETE BRIDGE—CLIFTON-METCALF HIGHWAY

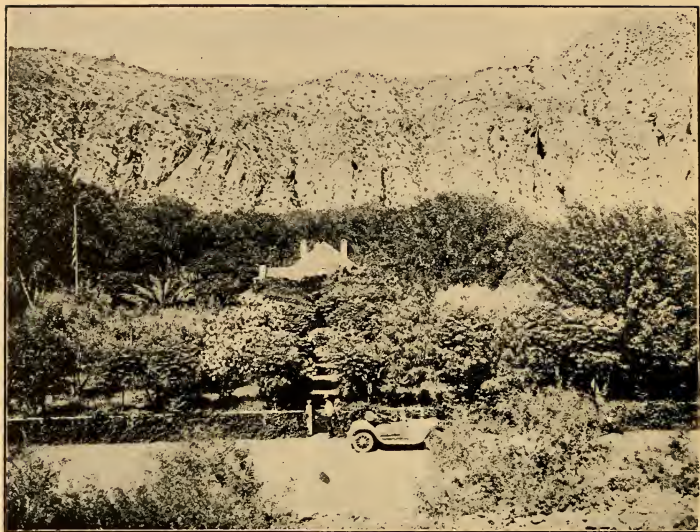
city. Among those worthy of mention are the County Court House, the City Hall, the Railway Station, the Post Office building, the Phelps Dodge Corporation buildings, the Church edifices, the School buildings and many beautiful residences.

Clifton's school facilities are equal to those found in any modern city. There are five grade schools and a well equipped High School in the city. Almost all religious denominations are represented, and several of them possess beautiful and substantial church edifices. The city supports a Masonic lodge, an Eastern Star, Consistory-Commandry Club, Harold E. Wilson Post American Legion, Elks Lodge, Odd Fellows and Rebecca lodge, Knights of Pythias lodge, and an Alianza Hispano-Americano lodge. Clifton can boast of the liveliest Commercial Club in the Southwest, from the standpoint of securing improvements for the city and the surrounding country. There is also an excellent Y. M. C. A.

Clifton is modern in every respect, having one of the best sewer systems in the country. The water system is the best that can be had, and the electric light plant is kept right up to the minute with the latest improved power generating machinery.



A RESIDENCE SCENE AT CLIFTON



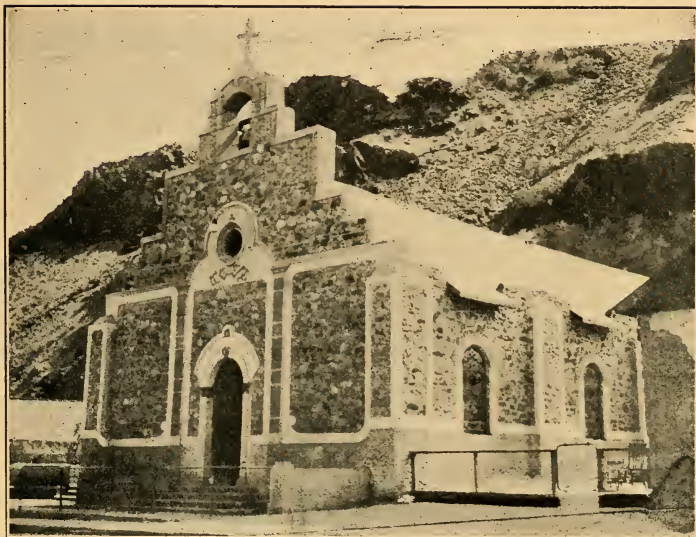
A RANCH SCENE NEAR CLIFTON

Concrete retaining walls on either side of the river adequately protect the residence and business sections of Clifton from flood waters that at times swell the San Francisco river, which runs through the city. Not only are the banks of the river thus walled, but Chase creek, which empties into it, is also safeguarded by concrete walls.

A large smelter owned by the Phelps Dodge Corporation is located in Clifton on the San Francisco river, about two miles from the heart of the city. The smelter,



METHODIST CHURCH AT CLIFTON



CATHOLIC CHURCH AT CLIFTON

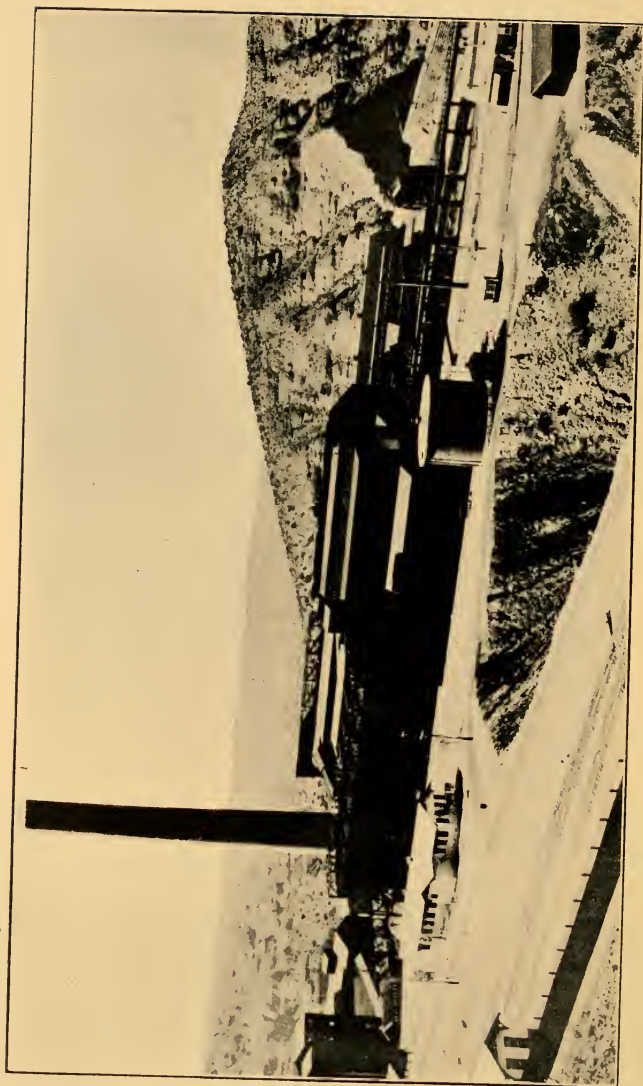
constructed of steel, concrete and tile, is thoroughly modern and up-to-date, and was blown in in 1913.

The capacity of the plant is about 1000 tons of ore and concentrate daily, which means that about five million pounds of copper bullion is produced from this smelter a month.

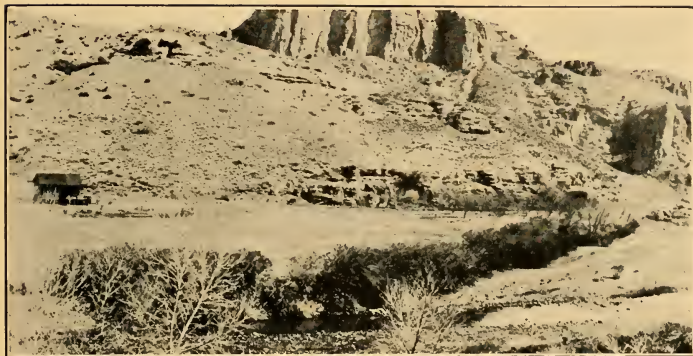
To those familiar with the process of producing copper a detailed account of the equipment will be interesting. There are three 100'x24' Reverberatory furnaces which will smelt 400 tons or more of charge, each, per day,



PRESBYTERIAN CHURCH AT CLIFTON



PHELPS DODGE CORPORATION SMELTER AT CLIFTON



VIEW OF EAGLE RIVER ABOVE THE PUMP STATION OF THE MORENCI WATER CO.

and these are equipped with seven 713 H.P. Stirling boilers for utilizing the waste heat from the furnace gases. Beside these, the plant has four other boilers which are direct-fired. There are four stands of 12' diameter Great Falls type converters, each with a daily capacity of sixty tons of copper.

There is a central power plant which contains three 2000 K.W. General Electric turbines, three 10,000 cubic feet Nordberg blowers and an Ingersoll-Rand compressor.

The smelter contains well built and fully equipped shops, warehouses, laboratory, change rooms and office building. All the machinery is electrically driven. The plant is not surpassed by any of its kind in the country, and when running to its full capacity employs about two hundred and fifty men.

Clifton has several large stores that carry the latest and best stock obtainable, three hotels, cafés and restaurants, a live newspaper, a sending and receiving



PUMP STATION OF THE MORENCI WATER CO.



A VIEW OF MORENCI

Radio station and two banks as strong as any in the country.

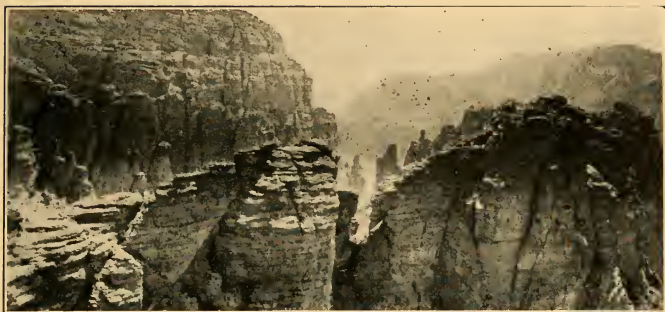
The First National Bank of Clifton was chartered in 1901, and is the only National Bank in Greenlee county. In 1921 the Peoples Bank and Trust Company was consolidated with and became a part of the First National Bank with a capitalization of \$100,000.00, and a surplus of \$20,000.00. The total assets of the bank are \$962,486.32, which makes it one of the best and strongest banks in the country. The officers and directors are numbered among the most substantial and successful business men of Clifton.

The Valley Bank is a branch of the Valley Bank of Phoenix and a separate report of any individual branch is impossible, for one unit is as the whole and the whole as one unit. It is a million dollar institution, and the Clifton branch is one of the most prosperous.

Clifton is the most cosmopolitan city imaginable, as one finds a large number of college graduates associating with the common miner, for the miner and common laborer of Clifton is not the rough element one is accustomed to connect with the mining camp. but they rank above



MORENCI CLUB—PHELPS DODGE CORPORATION



VIEW OF EAGLE RIVER CANYON BELOW PUMP STATION OF THE MORENCI WATER CO.

the average in being well informed and having more than ordinary ability.

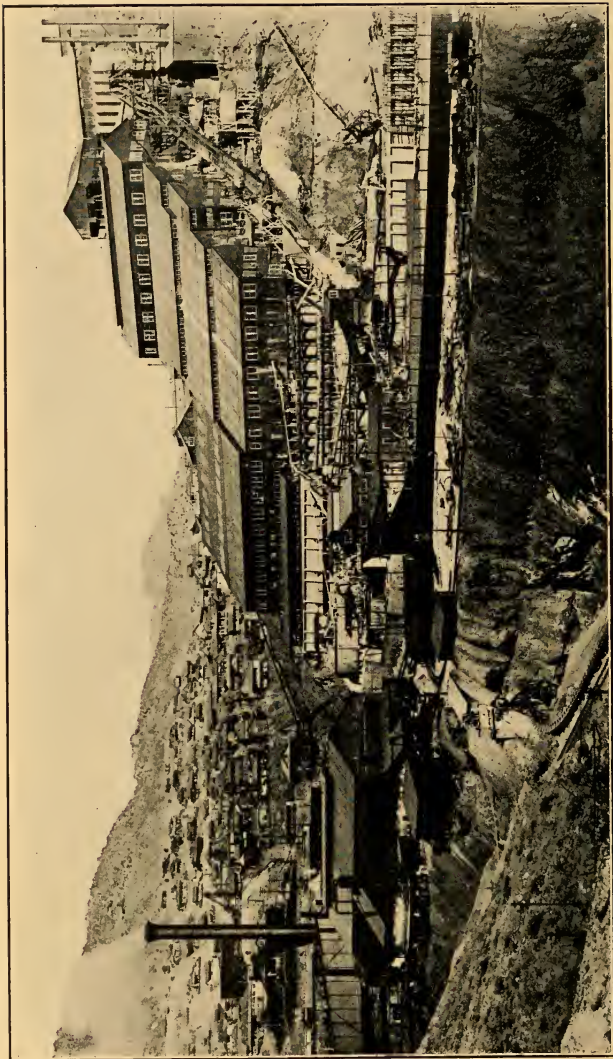
An hour's drive from Clifton one may enjoy a summer at an elevation of 7000 feet, where are found the big pines, the piñon, the cypress, the cedar, the juniper, the spruce, the fir, the buck, the live oak and the manzanita. This is at what is known as Granville. A few miles farther on is Gray's Peak, at an elevation of 7500 feet, and there are several cottages at this point where the business men of Clifton and Morenci spend the week-ends with their families.

Clifton is the shipping point of the cattle industry of northern Greenlee county. The range cattle of Greenlee county are the best in the country, and some of the largest cattle outfits in the state are located in this county; among those worthy of mention are the Toles Cosper, the Double Circle and the Lazy B.

When the Springerville road, which will connect with the National auto roads of the north as well as those of



GENERAL OFFICE, PHELPS DODGE CORPORATION, MORENCI



GENERAL VIEW OF PHELPS DODGE CORPORATION MILL NO. 6

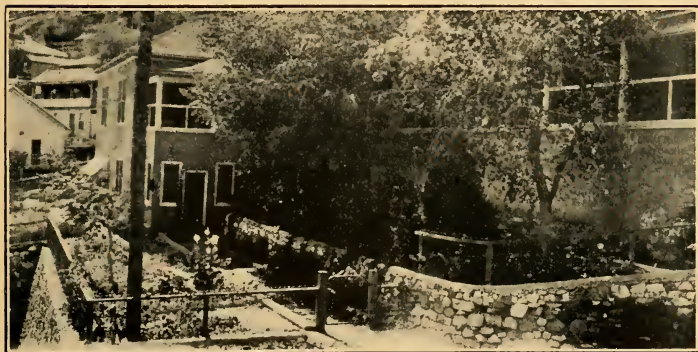


INTERIOR VIEW. GENERAL OFFICE, PHELPS DODGE CORPORATION, MORENCI

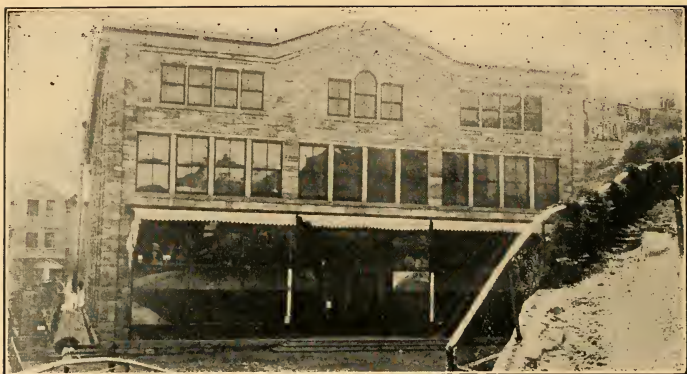
the south, is finished, there will doubtless be sawmills established at various points in the mountains among the big pines, as this will be an outlet for the lumber by auto truck to shipping points. According to a government report there is now available of white and yellow pine, Douglas and white fir, and spruce, a total of 625,147,815 feet, board measure.

MORENCI

THERE is surprise in store for the stranger on his first visit to Morenci. After leaving Clifton there is a seven mile drive over one of the best and most fascinating mountain auto roads ever built. All at once one finds himself driving up a narrow cañon into the very heart of the city, with beautiful little homes up the sides



PHELPS DODGE CORPORATION HOSPITAL, MORENCI

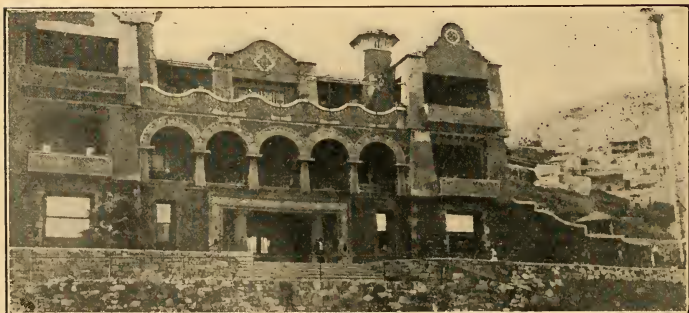


PHELPS DODGE MERCANTILE COMPANY STORE

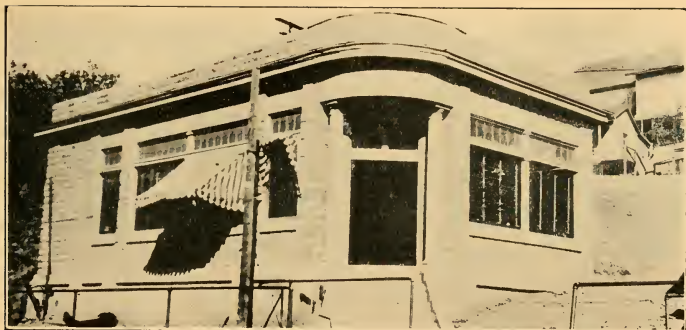
of the mountains that surround him like an amphitheatre. Massive buildings meet his gaze on every side of the cañon, and he stands amazed that man has accomplished such wonders where nature was lavish in piling up mountains and opening deep cañons, that make it almost inaccessible to a human being.

The city of Morenci is practically owned by the Phelps Dodge Corporation, and this in a measure accounts for the magnificence of public and private buildings, and the systematic way in which all are cared for. It is doubtful if there is another mining city in the world that can equal Morenci for elegance.

Of course Morenci has the ideal Arizona climate, with an elevation of 4,839 feet, and a normal population of about 9000. It has two splendid hotels and the Morenci Club, owned and maintained by the Phelps Dodge Corporation



HOTEL MORENCI, MORENCI



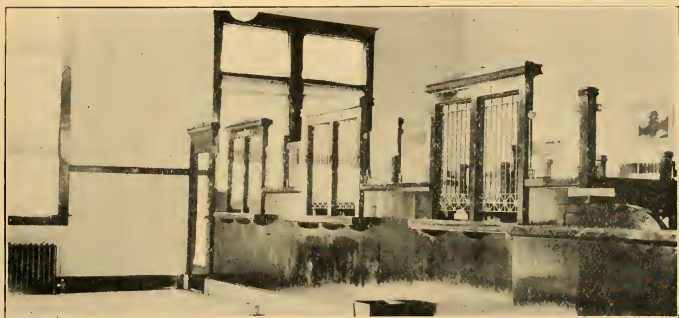
MORENCI STATE BANK

for the benefit of its employees. This building contains a movie theatre, a confectionery, pool and billiard tables, a reading room and auditorium.

The city of Morenci has several societies, among them the Masonic, Odd Fellows, Woodmen, Woodmen Circle, Knights of Pythias, Rebeccas, Alianza Hispano-Americano and Lloyd C. Hill Post American Legion.

The Phelps Dodge Corporation has about fifteen miles of surface railroad in the city. They maintain their own saw mill and cut all their own mine timbers in this mill. They also have a Corporation Hospital with the latest equipment, including an X-ray outfit, latest improved operating tables and surgical instruments. One chief surgeon and two assistants with three trained nurses are in attendance.

Morenci has two banks, garages, stores, an ice plant, a high and grammar school and grade schools, beside the corporation buildings.



INTERIOR VIEW OF THE VALLEY BANK, MORENCI



PRESBYTERIAN CHAPEL, MORENCI

Morenci has one of the finest school buildings and equipment in the state. One building houses both the high and grammar schools, the building being divided at the main entrance so that on entering the pupils can go to their respective sides without confusion. The building has no stairs, but rubber covered inclines are used from one story to another. The class rooms are unique, being well lighted, and having concealed cloak rooms at the rear, which are opened and closed by sliding panel doors hung on weights.

The auditorium is conceded by all who have seen it to be the most complete in the southwest. It has a seating capacity of over 500 and the stage, which is 80x40 feet, is so arranged that it is used as a gymnasium by means of a wire curtain, so that basket ball can be played. Each of the recitation rooms accommodates 20 to 25 pupils, and all the rooms are well lighted and perfectly ventilated, having a suction fan that draws all the foul air from every floor. The spiral fire escape is another feature of the building.

The chemical laboratory and the general science labora-



LONGFELLOW INCLINE SHOWING CLIFTON-METCALF ROAD AT BOTTOM OF CANYON



ON THE SPRINGERVILLE ROAD ABOVE METCALF

tory are both equipped with the largest assortment of apparatus of any school in the state. The home economics and domestic science departments are both complete with modern appliances. The manual training includes a woodworking and a mechanical department.

In normal times the school employs fifty teachers and there are about fifteen hundred students. The high and grammar school property is valued at \$180,000.00, while the two grade schools are valued at \$167,000.00, thus making the total value of Morenci's school property \$347,000.00.



A BEAUTIFUL VIEW OF THE SPRINGERVILLE ROAD



MORENCI, SHOWING SCHOOL BUILDINGS IN FOREGROUND

The Morenci State Bank began business in 1912 with a capitalization of \$30,000.00. The maximum resources have reached \$450,000.00 in the ten years of the bank's existence, and a \$30,000.00 surplus has been built up, so that today it has a working capital of \$60,000.00.

The Morenci branch of the Valley Bank of Phoenix was the second of the ten branches of that institution to be started. It was opened in 1902, and each unit is considered a part of the whole, so that a report made for one unit is made for the whole. In fact no separate reports are made of the branches. The capital and surplus of the entire system is \$1,000,000.00, and the total resources \$9,000,000.00.

The Phelps Dodge Corporation concentrator No. 6 is located at Morenci, and is one of the most complete



ON THE METCALF ROAD ABOVE CLIFTON

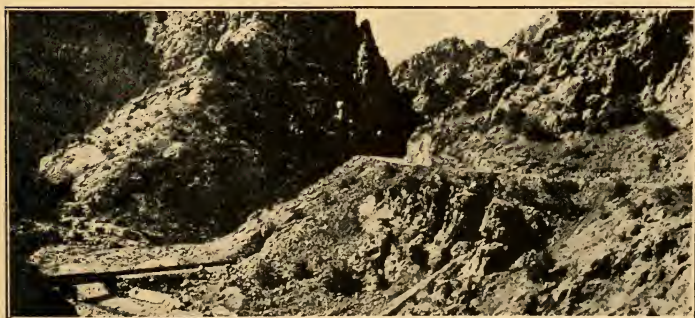


A MOUNTAIN VIEW ALONG THE SPRINGERVILLE ROAD

plants of the kind in the country. The ore is hoisted through the shaft to the head of the concentrator in 5-ton skips and dumped into a 1000-ton steel bin from which it is fed to the crushing plant. After the ore is crushed it is carried on a traveling belt to the storage bins, and is fed from these bins by means of automatic feeders. The ore is screened on electrically vibrated tables, and all the ore passing through the screens goes directly to the Wilfley tables for the first concentrating operation. All the screen oversize is then passed through eight pairs of 43" rolls, which reduce it to a size that will pass through the screens to which it is returned.

There are 28 Wilfley tables used to perform the first concentrating operation, recovering about 200 tons of concentrate daily. The residue is then ground to a size that will pass through a screen having 48 openings to the linear inch, and this size is treated by the flotation process for the recovery of the remaining mineral.

The flotation cells used are of the Callow pneumatic type. These cells are long shallow troughs with canvas



METCALF ROAD SHOWING RAILROAD IN CANYON

bottoms; under are air chambers connecting with air compressing machines.

Ball mills are used in grinding the ore to prepare it for the flotation process. These consist of iron cylinders 8' in diameter and 12' long over all, and are charged with from 10 to 15 tons of circular cast iron balls two and one-half inches in diameter. The cylinders rotating cascades of the ball charge causes it to grind the ore charge as it passes through the mill. Special flotation reagents are added in the mills during the grinding process. These reagents have a selective action for copper mineral grains, and with the compressed air blown through the canvas bottoms form a froth of bubbles which conveys the mineral over the sides of the flotation machines. This froth is collected in large dewatering tanks. About 350 gallons of fresh water is used in concentrating a ton of ore.

All the tailing material is collected in a flume which delivers it to the tailing dams, three and one-half miles away where it is stored, but before the tailing material leaves the concentrator about 65 per cent of its water content is removed to dewatering tanks and pumped to the head of the concentrator to be re-used.

The principal mining in and around Morenci is for copper ore. Active mining operations began in this district fifty years ago, in the year 1872. Morenci is the oldest porphyry camp in the state.

The principal properties of the district, including the Stevens Copper Mining Company, the Shannon Copper Company, the Arizona Copper Company, and the Detroit Copper Mining Company have been merged and were acquired by the Phelps Dodge Corporation in 1921. The holdings of the Corporation consist of 10,000 acres of mineral ground which is 10 miles long and 7 miles wide. One hundred and ten miles of underground workings are open, of which twenty miles are equipped with electric haulage. The district has produced as high as 80,000,000 pounds of copper per year. The principal

systems of mining employed are caving, top slicing and shrinkage. In normal times there are employed in the district approximately 2500 men.

Morenci has a very unique water system. The domestic supply is derived from wells and the industrial supply is taken from the Eagle river through a series of tunnels, flumes, ditches and basins. The pumping plant is located about six miles southwest of Morenci in the Eagle River cañon. The pumping equipment has a capacity of 3,000 gallons per minute under a head of 750 pounds per square inch. Each of the three pumps is directly connected into a ten inch main. The three ten inch transmission mains are each approximately five miles in length and discharge into two 500,000 gallon storage tanks located on a hill above Morenci. The water is distributed by gravity from these through over 100,000 feet of mains varying in size from 14 inch to $\frac{3}{4}$ inch. This system furnishes the entire domestic and industrial water supply of Morenci and Metcalf.

Nature in ages past must have played many pranks in the formation of the mountains in and around Morenci. Lying along side of what is probably the largest body of copper ore in the state of Arizona is a large body of silver ore which contains no trace of copper.

The reason for the presence of copper in one ore and the absence of it in another, in the same district, is one of the secrets of nature which man cannot explain. The Stargo Mines, Incorporated, have taken advantage of this natural occurrence of silver in a copper district and are erecting a mill to extract the silver values by using a watery solution of cyanide to dissolve the silver. As the silver is dissolved in the solution it is recovered by precipitating it with a zinc dust. The mill when completed will have a daily capacity of 75 tons of ore. The Stargo holdings embrace more than 400 acres of mineral land upon which are several veins of silver ore.

It is the plan of the owners of the Stargo to increase the capacity of their plant by adding units to the mill

as the occasion demands. The mining and milling of this ore will require a large number of men and afford a good market for all kinds of supplies, especially provisions and farm produce.

METCALF

METCALF is located nine miles above Clifton on the Springerville road. It is a part of the holdings of the Phelps Dodge Corporation and within the bounds of this town are some of the richest mines of the Corporation. Like Clifton and Morenci, this camp is surrounded by a wonderful scenic beauty.

Metcalf has a high school and grade schools, a first class department store and bank. A narrow gauge railroad from Clifton runs into the camp. This line is the oldest railroad in Arizona.

A corporation hospital is maintained at this place with a staff of competent physicians and nurses.

If any of our readers desire further information concerning the resources of Greenlee county, the location of mining prospects, vacation possibilities, hunting, fishing, or in fact anything about the county, they will receive detailed information by addressing either of the Commercial Clubs of the county, at Duncan or Clifton.





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